

one or more strings stretched over said body and said neck;

mounting means for mounting said neck to said body; and

continually adjustable means to move said neck vertically without changing the angle of said neck relative to said body

wherein said continually adjustable means comprises: a height adjustment screw insert fixably secured to said neck; and

a height adjustment screw extending from the back of said body through said height adjustment screw insert, said height adjustment screw fixably engaging said body to said neck and providing for the adjustment of the vertical height of said neck relative to said body by turning said height adjustment screw in a clockwise or counter-clockwise direction to increase or decrease the distance said neck extends from said body,

said height adjustment screw extending through a trap plate at the back of the instrument body, said trap plate configured to restrict the vertical movement of said height adjustment screw.

### **REMARKS**

Please change the previous Attorney Docket No. to the new attorney Docket No. 2647-004.

The rejection of claims 1, 2, 9 and 6 under 35 U.S.C. 103(a) as being unpatentable over Bunker in view of Harris is respectfully traversed. Bunker or Harris, standing alone or in reasonable combination, fail to teach or suggest " continually adjustable means to move said neck vertically without changing the angle of said neck relative to said body" (emphasis added).

In common string instrument parlance, adjustable string action refers to the adjustment of the height of the strings relative to the playing area of the neck of the instrument, in the present application, the area where the strings are located over the fret board. In Bunker there is absolutely no teaching nor suggestion of string action height adjustment.

Further, the Examiner's assertion that Harris discloses the use of a stringed musical instrument with an adjustment means to move the neck vertically without changing the angle of the neck relative to the body is not supported anywhere in Harris. Harris discloses a tilting mechanism for controlling the angle at which the neck extends away from the body. Harris has an adjustment mechanism for Harris's neck but it is for tilting (tilting screw 62), not for vertical movement of string height relative to the playing area of the instrument neck. In Harris there is a pivoting action, not vertical movement without changing the angle of the neck relative to the body. Consequently, the user of the instrument cannot change the action of the instrument without affecting the intonation or scale length of the instrument's strings by maintaining the angle of the neck relative to the body as is the case with Applicant's invention.

Further, Harris fails to teach or suggest a continuously adjustable means to move the neck vertically relative to the body, as now called for in Applicant's claims. Looking at Figs. 4, 7 and 8 of Applicant's specification and the corresponding text, one sees that a common tool such as an Allen wrench can be used to move the neck relative to the body in a vertical direction. The user does not have to loosen any screws or perform additional mechanical adjustments before manually adjusting the vertical height of the neck. This allows the user to adjust the height of the neck "on the fly" or during a performance without needing to de-tune the instrument's strings.

Since the filing of the instant application, Applicant's attention has been drawn to U.S. Patent No. 5,469,770 to Taylor, issued November 28, 1995. Taylor does disclose a string instrument where there is vertical adjustment of the height of the strings relative to the playing area of the neck. See Figures 7-11 and related text. However, Taylor is not continuously adjustable, as called for in Applicant's claims. It takes several steps before you can do an adjustment. Taylor allows you to do the initial setup when you are initially setting up or building a string instrument, but does not allow continuous adjustment that you might need, for example, between songs.

Taylor discloses an adjustable locking apparatus for securing the neck to the body of the instrument wherein a fastener must be loosened in order for the position of the neck relative to the body to be adjusted. The user must then tighten the fastener in order to secure the neck in position. In contrast, in Applicant's invention the neck is secured to the body in such manner that the height of the neck relative to the body can be adjusted "on the fly" without requiring the user to loosen any screws or perform any additional mechanical adjustments before manually adjusting the vertical height of the neck.

Further, it can be seen that Taylor requires a complicated series of adjustments in order to change the height of the neck relative to the body, including, but not limited to, loosening the sliding lock bolts and clamping bolts, taking the neck and manually moving or sliding the neck up or down the body to a specific location, and manually tightening the sliding lock bolts and clamping bolts. Taylor is significantly more cumbersome and complicated than Applicant's and cannot make micro-adjustments to the height of the neck relative to the body in an efficient or exact manner without great skill.

The rejection of claims 3-5 and 10-16 under 35 U.S.C. 103(a) as being unpatentable over Bunker in view of Harris and Steinberger is respectfully traversed and for the reasons set forth with respect to claims 1, 2, 9, and 6. Further, like the previously cited Harris reference, Steinberger is again a tilting mechanism and, it is not continuously adjustable as with Applicant's invention.

Claim 7 has been cancelled and rewritten as new claim 17, incorporating all of the limitations of the claims on which claim 7 was dependent, while claim 8 has been amended so as now to be dependent on newly presented claim 17. The Examiner has indicated that claims 7 and 8 had contained allowable subject matter.

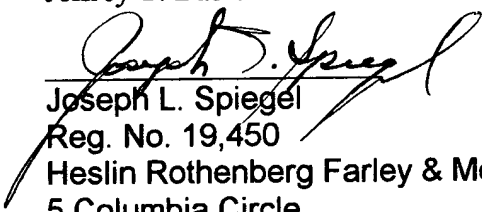
Reconsideration, allowance and passage to issuance are respectfully requested.

If there is any matter remaining that can be taken care of by telephone call or interview, the Examiner is requested to contact the undersigned at the number shown below.

Respectfully submitted,

Jeffrey T. Babicz

By

  
Joseph L. Spiegel  
Reg. No. 19,450

Heslin Rothenberg Farley & Mesiti P.C.  
5 Columbia Circle  
Albany, NY 12203  
T (845) 452-7840